



FRIDAY

7:30 pm

SBARA GENERAL MEETING AT HURRICANE ELECTRONICS FREMONT



October, 2015 Volume 15 Number 10





The Groundplane

Sometimes the ghosts of past



Club Since 1974

SBARA—The Newsletter of the South Bay Amateur Radio Association—KU6S

Presidents Massage—October

As many of you may know, my father decided that he wanted to move back to Binghamton (Upstate), New York, where he lived for a few years back around 2000. At first, his plan was to move next spring. But then he suddenly decided that he wanted to move by the end of September. Whoa! He was also planning to rent a 16' truck and tow his van behind it across country...alone. As his only son, I pretty much said, "Not on my watch!" Fortunately, we both have made this trip a few times before and we both like long driving trips. But one of my first thoughts was...how can I incorporate ham radio into the trip. It was easy to plan on brining an HT along. But I started to think about HF. That thought quickly vanished when I realized that I really needed to travel relatively light...something that I STILL don't do very well after years of business travel. So I focused on the HT, included extra batteries, had the PDF of the manual on my iPad, and even brought along a mag mount to put on the cab of the truck. One cool feature of the recent repeater guide is that it comes with the ability to download an app with the guide to my Android phone (or iPhone, I think). I had used this app a couple of times before, but since I only used it at home, I hadn't realized that the app will use your current location and list all of the repeaters near you. WAY COOL! I had used the trip planning repeater app in the past, but really found it awkward to use.

Anyway...while my dad was driving, one day, I fired up the HT, tuned to the national simplex calling frequency, and tossed out my callsign a few times. No response. I listened for quite some time, but didn't hear anything. Although I had made this trip a few times before...I found myself wanting to pay more attention to the surrounding country-side and the occasional story from my father. So... unfortunately...despite deciding to bring the HT and all the goodies and having the repeater directory at my fingertips, I didn't make any further attempts to make contacts. Now... that said...I will have two days and two nights in Binghamton, so I may see who I might find on the airwaves. There was one other bit of technology I decided to try. Brendon

Whateley (KK6AYI) and I decided to give Echolink a shot. [The secret word for the month is "Echolink." Write this word down on a slip of paper and hand it to Ray, at the next SBARA meeting, and receive one raffle ticket. Limit one ticket per person.] We did manage to have a QSO on the N6NFI repeater with our smartphones, but he did admit I was breaking up pretty badly. Well...I was in the middle of Wyoming and my Verizon phone was oscillating between 3G and 4G and who knows what else. I was going to try it during the 9am Talk Net, but kept forgetting to set a reminder in my phone. Frankly...even if I had remembered to set a reminder, I probably would have missed it due to passing over time zones. There is nothing like planning an arrival time and then realizing that you will be crossing a time zone and be an hour later. <sigh> I have to say...one billboard that I wished I had seen in time to shoot a picture of it, was advertising a CB shop. REALLY? I was talking to a trucker the other day and he pretty much said they only use it to coordinate when they are delivering their load and not much else. That is another gadget, that I brought, that didn't get much use...my scanner. I thought I'd hear a bunch of chatter on the CB frequencies. I turned it on close call and it only picked up a few state troopers. Like the repeater app, I must say that the Uniden BCD436HP is the perfect companion when driving across country, due to its built-in database. Just enter in the zip code and voila, you are scanning the appropriate frequencies for the area you are in! You can also interface a GPS with it. Yes...it was a challenge at times to figure out the zip code, but hey...that's what a smart phone is for. Unfortunately... that scanner is great for this type of purpose, but for the hard core scanner enthusiast, I think it dumb things down too much. It would really be nice to have the best of both worlds in one scanner, but Uniden has chosen to continue to sell an HP (home patrol version with the built-in database) and the BCD325P2, which is going on my Christmas list!

In the end...it has been a really enjoyable trip, but I wished I had been able to play more with my hobby. I'm also bummed about missing the California QSO Party (CQP) as I fly back on Monday. Oh well. I hope all of you HF operators had fun!

73!

Sometimes the Ghosts of Past Technologies Haunt us for Years

Sometimes the ghosts of past technologies haunt us for years.

Consider Disneyland's Monsanto House of the Future, built in the mid 1950s. It contained some peculiar ideas about what the future would hold. There was the ultrasonic dishwasher, the atomic food preservation system and countless other wonders housed within its curvy shell. Pretty silly.

But when the wrecking ball finally came for the exhibit, in the 1960s, it bounced right off the building's polymer walls. Disney employees had to roll up their sleeves and tear the home apart by hand.

IN PICTURES: GREAT TECHNOLOGIES HAUNT US STILL

Technological ghosts linger for many reasons. Many are embodiments of our hopes and dreams of the future, and so we let them go only with bittersweet regret. One example: the Concorde. The dream of supersonic commercial aviation never penciled out, financially, but that only made a ride across the Atlantic aboard one that much more special.

Nostalgia is another reason why old technologies continue to haunt us. If you're a boomer, you miss record players and typewriters. For a slightly younger crowd it's all about maniac rounds of Pac Man or Space Invaders on an Atari 2600 between gobbling slices of greasy pizza.

Other technological ghosts have seeped into our culture and current technology so deeply that we can't shake them out even when we try. The limits of Fortran rattled through software systems so deeply that we were all spooked about the prospect of simply flipping over the calendar on Jan. 1, 2000. Or, remember the standard computer punch card? It had just 80 columns, an artifact that remained in text editors for years after most of the cards were tossed away.

"We build our new technology edifices on the rubble of older technology," says Paul Saffo, a Silicon Valley technology forecaster who relishes telling the story of Disney's ill-fated house of the future and other now neglected technologies. "Every time you hit a key on your keyboard, there's a direct link back to some Babylonian farmer who was pressing a stylus into the clay."

Other technological ghosts are more ephemeral. When they were alive, they burst into public awareness with a blaze of glory—only to vanish, suddenly. But they left a lingering impression on our consciousness and technology. Take the Apollo program: No human has been beyond the orbit of the Earth since the Nixon administration. Yet even school-

children today know what the Apollo program was. And the technology it beget lives on. "Every time you turn on your computer you should thank Wernher Von Braun, John F. Kennedy and Neil Armstrong," Saffo says.

Other technologies enjoy a much richer afterlife. Look at videogames. While the lumbering relics of the computing past are torn up for scrap—or, if they're lucky, stashed away in a museum—games such as Pac Man or Galaga are endlessly recycled for use in online services, such as X-Box Live, or on mobile phones and handheld devices.

That kind of service-in-perpetuity could become the fate of a long list of technology that many people agree are right now lingering on death's doorstop. Human-piloted fighter jets and the humble compact disc are on the top of Saffo's list of technologies soon-to-be gone.

Saffo, for one, is stocking up on compact discs. "I really like the idea of buying music once and never having to buy it again," Saffo says. "I don't trust the DRM (Digital Rights Management) schemes."

And still other ghosts could return, one day, to save our hides. Take the ham radio. Although pockets of ham radio clubs exist around the world, many would say it's a dying art.

The network of amateur ham radio operators regularly spring into action during emergencies, such as hurricanes, when other lines of communication are cut. "It's the communications equivalent to that really reliable flashlight you keep at your bedside table. It works when nothing else does," Saffo says.

All we can say: It's not dead if it's still saving lives.

The Amateur Radio Parity Act of 2015

10/01/2015

The Amateur Radio Parity Act of 2015 — H.R. 1301 and S. 1685 — now has the support of 100 members of the US House of Representatives. Two additional cosponsors signed onto H.R. 1301 on September 24, raising the number of cosponsors to 99. Those members plus the House bill's sponsor, US Rep Adam Kinzinger (R-IL), total 100 proponents, and the number is expected to continue growing.

One of the newcomers agreeing to cosponsor H.R. 1301 was the congressman who represents the Connecticut House district that includes ARRL Head-quarters — Rep John Larson (D-CT). The other new cosponsor was Rep Kristi L. Noem (R-SD)

The Amateur Radio Parity Act of 2015 would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land use restrictions. Kinzinger introduced H.R. 1301 in March, with 12 original cosponsors from both sides of the aisle. Sen Roger Wicker (R-MS) introduced S. 1685 in June, with Sen Richard Blumenthal (D-CT) as the original cosponsor.

Recently the League took steps to address objec-

tions and concerns raised by representatives of community associations about the legislation. "Clarity on Amateur Radio Parity," makes it clear that the bill would *not* create new federal policy with respect to outdoor amateur antennas. As it points out, the FCC already recognizes a strong federal interest in effective Amateur Radio communication from residences and has adopted a limited preemption of state and local regulation of Amateur Radio antennas. The Amateur Radio Parity Act of 2015 would extend the limited preemption to private land-use restrictions. H.R. 1301 has been referred to the House Energy and Commerce Committee. Rep Greg Walden, W7EQI (R-OR), chairs that panel's Communications and Technology Subcommittee, which will consider the measure. S 1685 has been referred to the Senate Commerce, Science and Transportation Committee's subcommittee on Communications, Technology, Innovation, and the Internet, chaired by Sen Wicker, the bill's sponsor.

The ARRL continues to encourage members to write their US House and Senate members urging their cosponsorship of the legislation. <u>Visit</u> the Amateur Radio Parity Act of 2015 page for information on how you can get involved.

Rail Riding, Radio

Most of us have multiple hobby interests and it's always fun when we can combine them into a single event. Besides being an Amateur Radio operator, I'm lucky enough to be a locomotive engineer on the North Shore Scenic Railroad out of Duluth, Minnesota. We use VHF radios for railroad work, which would seem to limit opportunities to combine ham radio with railroads. Not true! Our railroad is part of the Midwest's premier Lake Superior Railroad Museum. While volunteering at the railroad, I've been involved in several radio projects. Recently, several local amateurs helped to design and install a repeater system for the 30 mile rail route. The system is used by train crews to communicate with each other as well as train dispatchers.

In 2011, I became curious as to how an HF station might operate from a moving passenger train. Many ham operators design and test their equipment to operate in harsh emergency conditions. Those operating conditions are never the same and never predictable. Operating "railroad mobile" would be another opportunity to adapt HF gear to an environment that was certainly not designed with long range communications in mind. A modest test involved a simple 20 meter wire attached to some existing insulators on a rail car's roof. A small group of operators made some good contacts and seeded the idea for a railroad mobile club.

Presidential Portable

In 2012, a small group got together and created the North Shore Scenic Railroad Radio Club with call sign NSØSR. Our goal is to sponsor at least one mobile event each fall for an entire day, operating as a special event station. This gives us an opportunity to design and test new antennas while operating in a very temporary and restricting environment. Using backup power for multiple stations in close proximity was also required as only 34 V dc train line power is available.

These 100 year old 34 V wires didn't run through the entire train and power was only available when the engine was operating. The portable generator allowed us to position our stations wherever it was convenient and to keep them operating when the train was idle.

On October 6, 2012, we operated from the old Duluth Missabe & Iron Range Railway Presidential Support Car W24. This early 20th century Pullman car has a large baggage area perfect for group gatherings. Large doors offer great views and fresh air. There is also a small seating ar-

ea where operators can relax and soak in the "clickety-clack" of the ride as they enjoy a bygone era. Private state rooms were used for operating both 20 and 40 meter stations. These rooms allowed up to four operators to assist in radio traffic and logging while sitting in 1920s comfort. High back Pullman chairs and large windows transported them back to the era of elegant railroad travel

The rail car's roof has three heavy-duty steel conduits welded along the length of the 85 foot car. These were installed when the 105 ton passenger car underwent renovations in the beginning of the 20th century to include such amenities as electric lighting. Our group used this conduit to attach an "X" bracing of 2 × 3 inch pine boards. Nine of the X braces were installed along the coach, allowing for both the 20 and 40 meter dipoles. Air choke baluns were placed on both ends of the coax runs, which were dropped down the side of the coach into the radio rooms. Due to height restrictions, our dipoles were limited to being no more than 3 feet off the roof. The total antenna height above the rail head was around 18 feet.

Rolling Radios

Our stations consisted of ICOM7200 and 7000 transceivers, both running off large AGM batteries. A Honda generator was on hand for charging and powering the laptops used in logging and PSK operations. A pair of Dunestar filters were used for out of band rejection considering our antennas were only a couple of feet apart. The filters worked flawlessly and neither station experienced interference.

Also on our train was a Soo Line Railway caboose in which we installed a CW station consisting of a Yaesu FT-817D transceiver driving a vertical antenna mounted to the roof grab irons. A second roof vertical was used for an Automatic Packet Reporting System (APRS) station. Antennas performed well with the exception of when we entered a tunnel. For that brief moment, the cell phone adage, "Can you hear me now?" applied.

Rail Riding, Radio

Our rail cars were attached to the morning train from Duluth to Two Harbors, Minnesota. This regularly scheduled tourist trip winds through the woods and along Lake Superior slowing for a few waterfalls and scenic locales. These provided great operating vistas for our purposes.

We left Duluth for the morning excursion and operated for 2 hours during the ride northeast along Lake Superior to Two Harbors. At Two Harbors, we took a lunch break while the excursion train stopped for the passengers to explore the area. After a 2 hour stop at Two Harbors, it was all aboard and another 2 hours of operating as we traveled back to Duluth.

The evening trip saw us switched onto the local tourist dinner train for another trip up the shore and back. We called our favorite pizzeria and placed an order. We stopped the train next to the eatery and picked up our food for the evening. Not too many amateur field operations can say they've done that!

Eighteen local hams operated over the several hours we were moving. It was great fun explaining to contacts that we were on a moving train. Many contacts mentioned having relatives either working for or retired from various railroads all over the country. We made just under 200 contacts with people from coast to coast as well as Canada, Mexico, and Cuba. Most had never made contact with a railroad mobile HF station. Some were skeptical until they heard the locomotive horn in the background or verified our moving APRS

signal.

A Good Match

We are very lucky to have supportive staff at the railroad. It also helps that the general manager has been involved in radio himself for decades. For local hams, our relationship with the museum is a great combination of being able to help out the museum with technical radio work as well as further the HF side of our hobby. It also gives us practice in using the space and conditions given to make an HF station work. Any time that we can practice our abilities to operate in unfamiliar environments we prepare ourselves for unknown situations in the future. Whether those are emergencies or a weekend operating session, they are all good preparation.

Information about our 2014 outings and photos of past events can be found at our QRZ.com page under the NSØSR call. We will announce the dates for our events on that page as well as at the eham.com, QST and CQ websites.

All photos courtesy of the author. Scott Parker, KDØHRM, became involved with Amateur Radio in 2009 and enjoys digital HF as well as HF manpack operating with an old military PRC-104B.



Pacificon gives you three great days of activities for one low cost: A full slate of outstanding Forum presentations about a wide range of amateur radio topics, a large Vendor Expo filled with exciting products and exhibits, an outdoor Swap Meet, great QRP activities, a Youth Forum and great Youth Activities including electronics kit building and soldering classes, a One Day License Prep Class to prepare you to pass the amateur radio Technician license examination and get your first amateur radio license, a chance to hear about and discuss important national amateur radio issues with top ARRL leaders, a chance to win radios and other great prizes throughout the convention, and perhaps the best part - a chance to interact and share information with lots of other amateur radio enthusiasts to further (or begin) your own knowledge and to advance the hobby.

Ham Radio Deluxe Features

The heart of Ham Radio Deluxe, Rig Control provides a customizable interface to control your amateur transceiver using its built-in computer aided control interface. Rig Control allows you to organize buttons, sliders, and drop-downs to toggle radio options, select modes and filter settings, and control various level inputs via your computer screen. HRD Rig Control brings out features buried in a modern rig's menus, making it easy for you to optimize your rig with a few clicks of the mouse.

Rig Control takes advantage of computer control features built in by your radio's manufacturer. Using your interface cable, Rig Control takes control of your radio to make the most of its features. It also provides the interface for the other modules of Ham Radio Deluxe to communicate with your radio: bring mode and frequency information straight into your logbook, key your radio while using exciting digital modes, and automatically adjust for Doppler shift while "working the birds."

Please click **HERE** for the full list of supported radios.





The North American QRP CW Club

(NAQCC) will be celebrating its 11th anniversary the week of October 12-18 with some fun on-air activities. Special event stations N1A, N2A, N3A, ... N0A will be on the air from all over the United States, and special certificates and QSL cards will be available for these contacts. The stations will be operating CW at QRP power levels and will be announced on our special spotting page (http://www.naqcc.info/spot_schedule.php) in almost real-time. (You do not need to be QRP but we encourage you to give it a try.) On Tuesday evening of that week (0030- 0230Z Oct 13) we will have our monthly sprint but with the bonus that all NAQCC members who participate will be automatically entered into a drawing for some great prizes.

More detailed information about our anniversary celebration can be found in our September newsletter at http://www.naqcc.info/newsletter_207.pdf . Information about the NAQCC, including a membership application (it's free), can be found at http://www.naqcc.info/.

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SBARA -GROUND-PLANE

The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material is the 20th day of each month for the next month's news-letter. Articles can be sent by email to hamradio at Comcast dot net or via U.S. Mail. Contact the Editor for details and submission guide-

Upcoming SBARA Events

SBARA Action Packed Meeting is October 9th.! Fantastic Raffle Prizes—So Come to the Meeting for the Fellowship!

Amateur Exams

ARRL VEC- October 13th. @ 6:30pm at Hurricane Electric – 48233 Warm Springs Blvd. Fremont. Contact: Greg at wy6pradio@gmail.com \$15 fee. Walk-ins accepted.

Additional information is described at the SBARA's Website, www.sbara.org
Select License Exams from the Navigation URL.

South Bay Amateur Radio Association — SBARA The Ground Plane — KU6S http://www.sbara.org P.O. Box 8401 Fremont, Ca.

